

## *Development and Debugging*

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### **Can an NI TestStand test sequence be imported into Supernova?**

Yes, users can import a TestStand test sequence but it may not leverage many of Supernova's features. There are specific steps you must take to ensure a seamless import.

### **What background knowledge must I have to use Supernova?**

NI TestStand experience is required to work with Supernova.

### **Is it possible to customize the TestStand process model?**

Supernova uses its own process model for single and parallel test.

The process model calls customizable functions as Teststand sequences, making user interaction simpler. You don't need to be expert with deep process model knowledge.

### **Can I add my custom Step Types to Supernova?**

Yes. Basically everything that is possible in TestStand is also possible in Supernova because it is 100% TestStand compliant.

### **Can I open sequence files that I have developed in Supernova using the TestStand sequence editor?**

Yes, all Supernova sequence files are 100% TestStand-compliant.

### **Can I change the parameters passed to a standard Supernova callback (i.e. my test project MainSequence or any process callback)?**

No, the parameters structure is used by the Supernova process model and cannot be changed. Additionally, there is no need to change it since all relevant information is passed in and out.

### **Does Supernova provide the 'Watches' feature?**

Yes, a full featured Watch function is available in Supernova. However make sure to disable it in production, because it could create significant overhead in terms of execution times. Supernova always starts with Watches disabled, even if the feature was left open.

### **How can I pass custom information among process callbacks and my application sequence file?**

Use the 'Data' custom container available in the Project and Socket containers. Those structures are available for all process and test application callbacks.

### **Can I use 'All Executions Share The Same File Globals' option for my MasterSequence file in process set or development?**

Yes. But keep in mind that doing so means you lose the advantage of using Variants to 'deviate' FileGlobals in your test application.

### **Can I use 'FileGlobals' as a global variable container?**

Yes, but we recommend using Notifications/Queues for this purpose because FileGlobals are not multithread safe.

### **Can I add my Resource Type description in Supernova?**

Yes, please refer to the Supernova User Manual for further instructions. To use your definitions in Supernova there is a full set of APIs available for LabVIEW, Win32 environments and .NET.

**Can I debug the entire process in Test Execution HMI?**

Yes, check the 'Run Start Process in Test Execution HMI' in Supernova Options; select the HMI 'Full Debug' template that comes with Supernova and take advantage of all the features.

**Can I debug the entire process in Master Sequence Editor?**

Yes, uncheck the 'Run Start Process in Test Execution HMI' in Supernova Options and click on 'Start Process' in Master Sequence Editor.

**When I have 'break at first step' checked in Master Sequence Editor and I click on 'Start Process' with the 'Run Start Process in Test Execution HMI' option unchecked, how does Supernova behave?**

Supernova will break at the first step of all process-related callbacks, giving the feeling of the actual process flow.

**If I forget to remove a breakpoint in my sequence file, is it maintained when I execute the process in the Test Execution HMI?**

The breakpoint will be honored in the Test Execution HMI, unless the TestStand and Supernova privileges that apply for the current user and context are against breaking at breakpoints. In particular, the Supernova custom privilege called Custom->Supernova->TestRun->AllowBreakpoints prevents breakpoints from operating in the Test Execution HMI when set to false.

**Can I define my custom users in Supernova?**

Supernova installs with a pre-configured number of users. However since Supernova inherits the users defined in the TestStand sequence editor, you have full freedom in configuring your own users and privileges.

**Why does Supernova allow the creation of multiple profile projects in the same installation?**

You can have an unlimited number of different profile projects in your station. However only two of them will be used by the Process Model: 'Default Profile For Production' and 'Default Profile For Service'. They are set in your Default Station Project.

**What is the profile project that can be used in all possible scenarios?**

In test execution & development it is the 'Default Profile For Production'.

In service it is the 'Default Profile For Service'. In process set it is the currently opened project.

**Why does Supernova allow creation of multiple station projects in the same installation?**

You can have an unlimited number of different station projects in your installation. However, only one will be used by the Process Model. To set a certain Station Project as the Default, open it in System Set and push the 'Set As Default' button in the Ribbon.

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## ***SuperNova Release Management***

**Which release management packages does Supernova supports?**

Supernova supports Subversion and Perforce. However, through its plug-in structure, additional packages can be added.

**Why is my project marked as conflicted and is not editable?**

Supernova does not make any decision on conflicted depots/repos: in such a case it attempts to open the project in read/only mode while waiting for the user to resolve conflicts manually. The only action available is 'Revert'.

### **Why is my project marked as read/only when using the Perforce Plug-in?**

There are several reasons this may occur:

- The project is conflicted
- A 'Check-out' request was not made after the last 'Submit'. Supernova assumes that a project is checked-out for editing if at least one file in the project is checked-out. Therefore mixed situations (possible if working manually) may create conflicts. We recommend, when possible, that users avoid manual management on workspaces managed by Supernova.

### **Is file locking used by Supernova in the Perforce and Subversion plug-ins?**

No, currently Supernova does not support this feature.

### **What does it mean if Supernova reports that a project is out-of-date?**

Supernova treats a project in an atomic way. A project is considered out-of-date when at least one of the following conditions is met:

- Files are checked out for editing
- At least one versioned file is modified
- At least one versioned file was manually deleted
- There is at least one unversioned file in the local copy

### **What happens when a 'Revert' command is issued?**

- All versioned files that are modified are reverted back to the depot/repo content.
- All unversioned files are permanently removed from the local copy.
- After a Revert command, the project is considered up-to-date.

### **What happens when a Submit/Commit is issued on a project?**

- All versioned files in the local copy that are recognized as modified are submitted to the depot/repo.
- Manually deleted files are also deleted from the depot/repo.
- Unversioned files are added to the depot/repo and placed under Software Revision Control

### **What happens when 'Update (Sync) to Revision' is issued?**

The local copy of the project will be an exact snapshot of the content revision.

This means that all pending changes are reverted to the depot/repo content. All unversioned files are permanently removed.

### **What happens when 'Rollback to revision' is issued?**

This is the same as 'Update (Sync) to revision' with the only IMPORTANT difference that a new highest revision is created containing the exact snapshot or the provided revision; the overall effect is that all revisions from the latest to the selected one are backed out. In other words all changes from the latest revision to the selected one are removed. This feature must be used with care.

### **Does Supernova support branches in term of software revision management architecture?**

No, branch is an advanced feature outside the scope of Supernova.

**Does Supernova support merging in terms of software revision management architecture?**

No, not unless the software revision management plug-in merges files when updating (e.g. Subversion). Any conflict and merge resolution must be done manually.

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**Test Execution HMI****Can I customize the details shown in the Test Execution HMI?**

You can customize almost all details and their appearance. Supernova also allows you to prepare predefined HMI layouts that are easily interchanged in System Set -> HMI tab.

In the Supernova User Manual there is a detailed description on how to customize the templates.

Supernova installs 2 basic Templates ('Minimal' and 'Full Debug') that are suitable in almost all use cases.

**Can I change the way Supernova lays out my socket windows in Test Execution?**

Yes, you can do this by customizing the HMI Template definition in the Default Station Project.xml file (refer to the Supernova User Manual).

**I am programmatically sending some HMI socket messages; when I run Test execution I cannot see them anywhere. What is wrong?**

You should verify that the 'CustomMessageRegion' child element in the Station Project.xml file (for the Active HMI template) has the show attribute set to "true".

**I am programmatically trying to display custom fields in my HMI socket window; when I run the Test Execution I cannot see them anywhere. What is wrong?**

You should verify that the 'CustomFieldsRegion' child element in the Station Project.xml file (for the Active HMI template) has the show attribute set to "true".

If you cannot find an answer to your question here, please contact Alfamation at [info@alfamationglobal.com](mailto:info@alfamationglobal.com)